

WHAT IS CLAIMED IS:

1. A bonding pad of a semiconductor device comprising:
 - a barrier metal layer formed on a structure of a semiconductor substrate;
 - a metal wire layer formed on the barrier metal layer;
 - 5 a passivation metal layer formed on the metal wire layer and removed partly to expose a portion of the upper surface of the metal wire layer;
 - an insulating layer which is formed on the passivation metal layer and has a contact hole exposing the metal wire layer via the portion that the passivation metal layer is removed; and
 - 10 an adhesive metal layer formed on the inner surface of the contact hole.
2. The bonding pad of claim 1, wherein the adhesive metal layer is made of any one of metallic material selected from a group of Al, Ti, and TiN.
3. The bonding pad of claim 1, wherein the adhesive metal layer has a thickness of 1000-3000 Å.
- 15 4. A formation method of a bonding pad of a semiconductor device comprising:
 - forming a barrier metal layer on a structure of a semiconductor substrate and depositing a metal wire layer and a passivation metal layer on the barrier metal layer;
 - forming an insulating layer and a passivation layer covering the barrier metal layer, the metal wire layer, and the passivation metal layer;
 - 20 forming a contact hole by coating a photoresist layer on the passivation layer, exposing and developing the photoresist layer to remove a portion of the photoresist layer selectively on an area where a contact hole will be formed, and etching the passivation layer exposed by the removed portion of the photoresist layer and the insulating layer and passivation metal layer under the passivation layer;
 - 25 removing the photoresist layer and forming a metal layer on entire surfaces of the passivation layer and the contact hole; and
 - forming an adhesive metal layer by dry-etching the metal layer to remove portions of the metal layer placed on the surfaces of the passivation layer and metal wire layer and thus remaining only the portion of the metal layer inside the contact hole.

5. The method of claim 4, wherein the metal wire layer is formed by depositing aluminum alloy at a temperature of equal to or higher than 100°C.

6. The method of claim 4, wherein the metal layer is made of any one of metallic material selected from a group of Al, Ti, and TiN.

5 7. The method of claim 4, wherein the metal layer has a thickness of 1000-3000 Å.

8. The method of claim 4, wherein the metal layer is deposited at a temperature of 200-400°C.